Date of Application, 2nd Apr., 1892 Complete Specification Left, 2nd Jan., 1893—Accepted, 11th Feb., 1893

PROVISIONAL SPECIFICATION.

Improvements in Golf Clubs.

I, ROBERT ANDERSON of 67 Princes Street, Edinburgh in the County of Midlothian, North Britain, Fishing Tackle Manufacturer, do hereby declare the nature of this invention to be as follows:-

This invention which relates to improvements in golf clubs has reference more 5 particularly to those clubs which are made of wood, celluloid or like material, and has more particularly for its object to prevent heeling of the ball and thereby to drive longer and straighter balls than by the present shape of wood clubs; and other advantages are obtained by my improvements.

I get rid of the present rounded heet by making that part a continuation of the 19 striking surface: I am thus enabled to shorten the head, whilst at the same time obtaining as long a striking surface as with the present club. The striking surface is thus brought pearer to the line of the shaft, the lead being correspondingly placed nearer the line of the shaft

By this arrangement, the part of the club where there used to be a rounded heel 15 and which was a part liable to be struck and the ball thereby caused to be glanced off the club and thus to be badly driven, is now made a part of the flat striking surface from which the ball is driven as strong and as true as from the middle or other part of the striking surface.

Also by my invention of shortening the head and bringing the lead nearer to the 20 line of the shaft, the leverage from a badly struck ball, which tended to divert the proper position of the club when striking the ball, is reduced or is overcome, that is to say, for example, when a ball is struck by the too or heel end of the club.

The face of the head may be in a line with the shaft, or it may project a sufficient extent to increase the strength of the neck, and to improve the balance of the club by tending to equalize the weight of the head at either side of the neek; this construction further reduces the tendency of the club to turn or twist when striking

The improved form of the face of the club offers special facility for facing it with leather, horn, celluloid or the like, when a facing is required for playing with very bard balls.

As a modification of my said invention, I attach the head to the shaft without a neck. I take any ordinary head formed without a neck portion and bore a hole for the reception of the shaft, in such a position that the striking surface is behind as well as in front of the shaft, whereby I obtain a perfectly balanced head by equalizing the leverage before and behind the line of the shaft.

In this arrangement the centre of the lead is immediately behind the centre of the shaft where the shaft passes through the head and also behind the centre of the striking face or surface.

I might in some cases add a neck to the head to improve the appearance of the club or to strengthen the club.

I do not limit myself to the adaptation of my several improvements to the precise kind of golf ciub heads described as it is obvious that my improvements are applicable to various other kinds or shapes of golf cino heads,

Dated this 28th day of March 1892.

JOHNSONS,

115, St. Vincent Street, Giasgow, Petitioner's Agents.

Price 8d.

K04619 or not still

BEST AVAILABLE

Anderson's Improvements in Golf Clubs.

COMPLETE SPECIFICATION. Improvements in Golf Clubs.

I. ROBERT ANDERSON of 67 Princes Street, Edimburgh, North Britain, Fishing Tackle Manufacturer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention which relates to improvements in golf clubs has reference more 5 particularly to those clubs which are made of wood, celluloid or like material and has more particularly for its object to prevent heeling of the ball and thereby to drive longer and straighter balls than by the present shape of wood clubs; and other advantages are obtained by my improvements.

Figure 1 of the accompanying drawings is a side view of the striking face of the 10

club and Figure 2 is a plan of the same.

Figures 3, 4 and 5 are views of modifications.

As shown in Figures 1 and 2 1 get rid of the present rounded heel by making that part a continuation of the striking surface as snown at A; I am thus enabled to shorten the head whilst at the same time obtaining as long a striking surface as 15 with the present club. The striking surface is thus brought nearer to the line of the shaft B, the lead C being correspondingly placed nearer the line of the shaft.

By this arrangement, the part of the club where there used to be a rounded heel and which was a part liable to be struck and the ball thereby caused to be glanced 20 off the club and thus be badly driven, is now made a part of the flat striking surface from which the ball is driven as strong and as true as from the middle or other part of the striking surface.

Also by my invention of shortening the head, and bringing the lead nearer to the line of the shaft, the leverage from a badly struck ball, which tended to divert the 25 proper position of the club when striking the ball, is reduced or is overcome, that is to say for example when a ball is struck by the toe or heel end of the club.

The face of the head may be in a line with the side of the shaft or as shown in the drawing Figure 2 it may project a sufficient extent to increase the strength of the neck and to improve the balance of the club by tending to equalize the weight 30 of the head at either side of the neck; this construction further reduces the tendency of the club to turn or twist when striking the ball.

With regard to the modified form of head as shown in Figures 3 and 4, I attach the head to the shaft without a neck, the hole for the shaft being bored through the head in such a position that the striking surface is behind as well as in front of the 35 shaft, whereby I obtain a well balanced head by equalizing the leverage before and behind the line of the shaft.

I do not limit myself to the precise formations as shewn in the drawings, for example Fig. 5 shews a modification in the position of the shaft relatively with the head by which there is a striking surface at the side of or a little behind the line 40 of the shaft.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

The improvements in wood golf clubs, or golf clubs of like material, substantially 40 as and for the purposes hereinbefore described and shewn in the accompanying drawings.

Dated this 29th day of December 1892.

JOHNSONS, 115, St. Vincent Street, Glasgow, Petitioner's Agents.

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A.D. 1892. APRIL 2. Nr. 6385. ANDERSON'S COMPLETE SPECIFICATION. Fig. 1. Fig. 2. K04621 Cor lier Manage Base 27 Office, 1893

SHEET'S Tuy 3 [This Drawing is a reproduction of the Original on a reduced scale] Fig. 4. B Fig 5 -K04622

-	D63,284	Challis
-	D191,314	Mengel
-	D271,783	Simmons
-	D405,492	Kubica et al.
• ,	D276,452	Doman
•	D298,270	Smith
•	D303,559	Florian
•	D314,802	Warner
	3,595,582	Chapman
	D337,803	Sillers
	D354,785	Luks
	D380,799.	Arnold
	D247,791	Monteleone
	6,106,412	Kosugi et al.
	5,941,782	Cook
	4,697,813	Inoue
	5,242,168	Aizawa
	3,810,621	Mills
	5,042,806	Helmstetter
	5,839,973	Jackson
	5,851,155	Wood et al.
	1,249,127	Lard
	71 3,845	Braid et al.
	1,994,149	Root
	1,897,264	Lamb et al.
	1,574,213	Tyler
	5,632,695	
	2,460,435	
	4,754,969	
	5,61 1,740	
	1,551,563	>
	1,553,867	
	2,067,556	
	2,219,670	
	5,149,091	
	5,197,733	
	5,280,923	
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